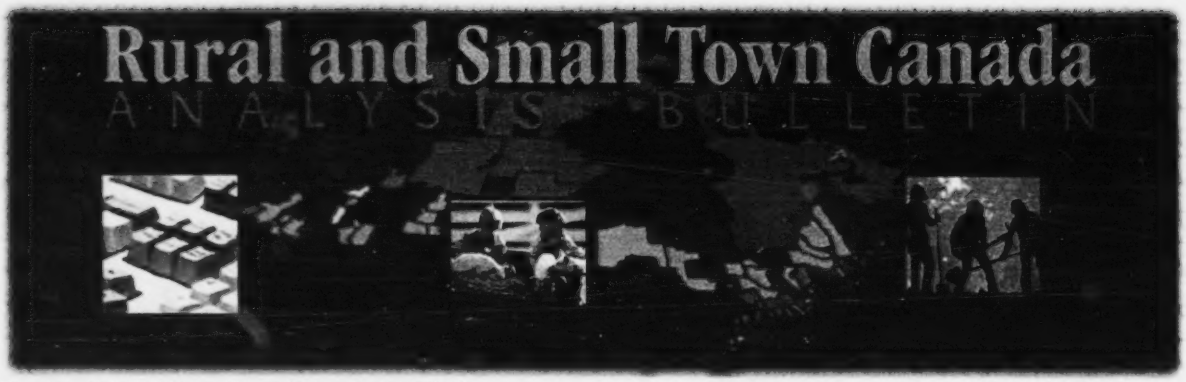


Rural and Small Town Canada Analysis Bulletin
Vol. 7, No. 7 (November 2008)

Catalogue no. 21-006-X

Structure and Change in Canada's Rural Demography: An Update to 2006

Ray D. Bollman and Heather A. Clemenson, Statistics Canada

Highlights

- **For Canada as a whole, the rural population is growing.**
- **Most, but not all, of the growth is in areas adjacent to metro areas.**
- **Growth of the rural population is less than the growth in urban areas. Thus the rural share of Canada's total population continues to decline.**
- **The rural population is not growing in all provinces. Each province and territory has reported rural population growth and rural population decline in recent decades.**
- **Depending on how rural is defined, in 2006, 19% to 30% of Canadians were living in a rural area.**

Introduction

Demography is a key aspect of rural development. How many people live in rural Canada? Is the rural population increasing or decreasing? Is this a short-term fluctuation or a long term trend? The size and pattern of growth of the rural population is typically the first question of interest to rural policy analysts, organizations and researchers.

This bulletin updates and summarizes information on the structure and trends for the rural population of Canada, using three major definitions of rural Canada: the "census rural" definition, the "rural and small town" definition and the OECD "predominantly rural region" definition. These definitions are explained in Box 1. Each definition illustrates a specific aspect of rural Canada. As discussed by du Plessis *et al.* (2001), the choice of a definition should be driven by the rural issue or question being considered. Some examples are provided in Box 1.

At the Canada level, the general trends are similar regardless of the definition used. The differences are found in the details because the results for the three different definitions of rural capture population trends at differing geographic scales.

M121

IMPORTANT NOTE CONCERNING THE FOLLOWING PAGES

THE PAGES WHICH FOLLOW HAVE BEEN FILMED TWICE IN ORDER TO OBTAIN THE BEST REPRODUCTIVE QUALITY

USERS SHOULD CONSULT ALL THE PAGES REPRODUCED ON THE FICHE IN ORDER TO OBTAIN A COMPLETE READING OF THE TEXT.

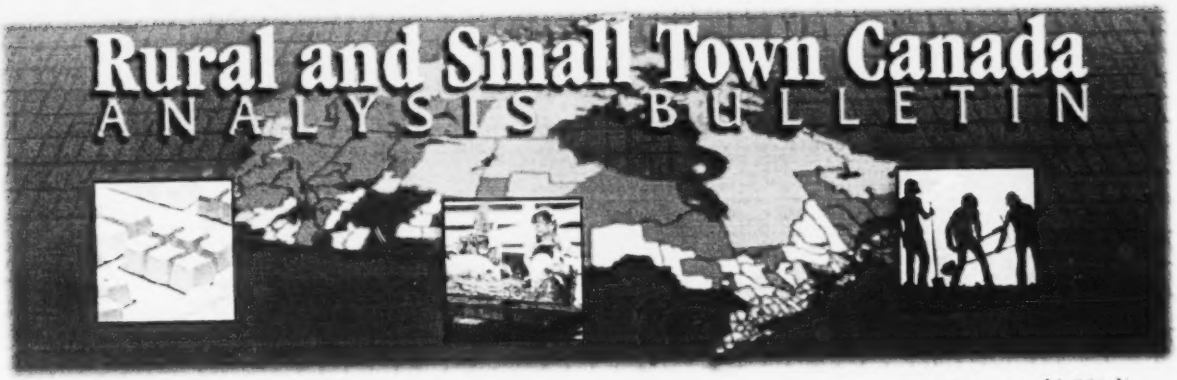
REMARQUE IMPORTANTE CONCERNANT LES PAGES QUI SUIVENT

LES PAGES SUIVANTES ONT ÉTÉ REPRODUITES EN DOUBLE AFIN D'AMÉLIORER LA QUALITÉ DE REPRODUCTION

LES UTILISATEURS DOIVENT CONSULTER TOUTES LES PAGES REPRODUITES SUR LA FICHE AFIN D'OBTENIR LA LECTURE DU TEXTE INTÉGRAL

Micromedia
ProQuest

789 East Eisenhower Parkway
PO Box 1346
Ann Arbor, MI 48106-1346 USA
toll free: 1-800-521-0600
fax: (734) 997-4247
web: www.micromedia.ca



Rural and Small Town Canada Analysis Bulletin
Vol. 7, No. 7 (November 2008)

Catalogue no. 21-006-X

Structure and Change in Canada's Rural Demography: An Update to 2006

Ray D. Bollman and Heather A. Clemenson, Statistics Canada

Highlights

- **For Canada as a whole, the rural population is growing.**
- **Most, but not all, of the growth is in areas adjacent to metro areas.**
- **Growth of the rural population is less than the growth in urban areas. Thus the rural share of Canada's total population continues to decline.**
- **The rural population is not growing in all provinces. Each province and territory has reported rural population growth and rural population decline in recent decades.**
- **Depending on how rural is defined, in 2006, 19% to 30% of Canadians were living in a rural area.**

Introduction

Demography is a key aspect of rural development. How many people live in rural Canada? Is the rural population increasing or decreasing? Is this a short-term fluctuation or a long term trend? The size and pattern of growth of the rural population is typically the first question of interest to rural policy analysts, organizations and researchers.

This bulletin updates and summarizes information on the structure and trends for the rural population of Canada, using three major definitions of rural Canada: the "census rural" definition, the "rural and small town" definition and the OECD "predominantly rural region" definition. These definitions are explained in Box 1. Each definition illustrates a specific aspect of rural Canada. As discussed by du Plessis *et al.* (2001), the choice of a definition should be driven by the rural issue or question being considered. Some examples are provided in Box 1.

At the Canada level, the general trends are similar regardless of the definition used. The differences are found in the details because the results for the three different definitions of rural capture population trends at differing geographic scales.

Rural and Small Town Canada
Analysis Bulletin

ISSN 1481-0964
ISBN 978-1-100-11011-0

Editor: Ray D. Bollman
Associate Editor: Neil Rothwell

Published in collaboration with The Rural Secretariat, Agriculture and Agri-Food Canada. The ***Rural and Small Town Canada Analysis Bulletin*** is an occasional publication of the Agriculture Division of Statistics Canada. To obtain a single issue, visit our website at www.statcan.gc.ca and select Our Products and Services.

Contact the Agriculture Division at:

Agriculture Division, Statistics Canada
Ottawa, Ontario K1A 0T6

Toll free telephone number: 1 800 465 1991

Internet: agriculture@statcan.gc.ca
Fax: (613) 951-3868

Editorial Committee: Denis Chartrand, Jeffrey Smith, Heather Clemenson, Bishnu Saha, Marco Morin, Aurelie Mogan and Deb Harper.

Special thanks to Véronique Julien and Josée Bourdeau for their contribution in the publication process.

Published by authority of the Minister responsible for Statistics Canada.
© Minister of Industry, 2008.
All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means–electronic, mechanical or photocopy–or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "Providing services to Canadians".

Symbols

The following standard symbols are used in this Statistics Canada publication:

.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0^s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p}	preliminary
^{r}	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E}	use with caution
F	too unreliable to be published

The overall picture, at the Canadian level, is that the rural population is growing. Most, but not all, of this growth is taking place in areas adjacent to larger urban centres. However, rural population growth is less than the growth in urban areas. As a result, the rural share of Canada's total population continues to decline. Moreover, the rural population is not growing in all provinces. Each province and territory has reported rural population growth and rural population decline in recent decades.

The trends described by the census rural definition add a longer temporal perspective to this broad picture and show the turning points in Canada's urbanization pattern. The rural and small town definition emphasizes the labour market dimension of urban agglomerations. Differences within rural and small town areas, classified by using Metropolitan Influenced Zones, show how the proximity to major agglomerations has an important impact on population growth patterns. The OECD definition of predominantly rural regions emphasizes that when a broader, regional scale is used to delineate the rural population, the size of the rural population is larger than when the rural population is documented at a smaller scale of locality or community.

This analysis is entirely based on data from the Census of Population from 1981 to 2006 (Statistics Canada, 2007).

Box 1 Definitions of rural

Various rural definitions are presented in the bulletin by du Plessis *et al.* (2001) and more details are available in the longer working paper (du Plessis *et al.*, 2002).

Census rural: This is the definition of rural used by Statistics Canada's Census of Population. This definition has changed over time (see Appendix A in du Plessis *et al.*, 2002). Typically, it has referred to the population living outside settlements of 1,000 or more inhabitants. The current definition states that census rural is the population outside settlements with 1,000 or more population with a population density of 400 or more inhabitants per square kilometre (Statistics Canada, 2007).

Rural and Small Town (RST) refers to areas outside Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs). A CMA has a total population of 100,000 or more with 50,000 or more in the urban core and a CA has an urban core of 10,000 or more. Both CMAs and CAs include neighbouring towns and municipalities where 50% of more of the workforce commutes to the urban core (Statistics Canada, 2007). The term **Larger Urban Centre** (LUC) refers to both CMAs and CAs. In 2001, there were 471 towns and municipalities (census subdivisions) classified as part of one of Canada's 27 CMAs and there were 524 towns and municipalities classified as part of one of the 113 CAs in Canada (Statistics Canada, 2002, Table 1 and Table 3).

Metropolitan Influenced Zone (MIZ): The RST population may be disaggregated according to the degree of influence of larger urban centres (du Plessis *et al.* 2002, McNiven *et al.* 2000). Towns and municipalities (i.e. census subdivisions) are classified according to the share of workers who commute to a larger urban centre. The categories are **Strong MIZ** (where 30% or more of the workforce commutes to an urban core), **Moderate MIZ** (where 5% to 29% commute to any urban core); **Weak MIZ** (where greater than 0% but less than 5% commute to any urban core) and **No MIZ** (where there are no residents commuting to an urban core).

Predominantly rural regions: The OECD (1994) defined a "predominantly rural region" as having more than 50% of the population living in rural communities where a "rural community" has a population density less than 150 persons per square kilometre. In Canada, the census division has been used to represent "regions" and census consolidated sub-divisions have been used to represent "communities". **Intermediate regions** have 15% to 49% of their population living in a rural community. **Predominantly urban regions** have less than 15% of their population living in a rural community. Predominantly rural regions are classified **as rural metro-adjacent, rural non-metro-adjacent** and **rural northern**, following Ehrensaft and Beeman (1992). Rural metro-adjacent regions are predominantly rural census divisions which are adjacent to metropolitan centres while rural non-metro-adjacent regions are those predominantly rural census divisions which are not adjacent to metropolitan centres. Rural northern regions are predominantly rural census divisions that are found either entirely or mostly above the following lines of parallel in each province: Newfoundland and Labrador, 50th; Quebec and Ontario, 54th; Manitoba, 53rd; Saskatchewan, Alberta and British Columbia, 54th. As well, rural northern regions encompass all of the Yukon, Northwest Territories and Nunavut.

Du Plessis *et al.* (2001) emphasize that the choice of the definition of rural by an analyst should be determined by the topic being addressed. A rural definition based on small building blocks (i.e. each geographic unit that is assigned as "rural") should be used for the analysis of issues requiring a local solution. Examples might include day care services or quality of local well water (but, of course, sometimes these issues are managed at different scales in different situations). The delineation of census urban and census rural uses small geographic units.

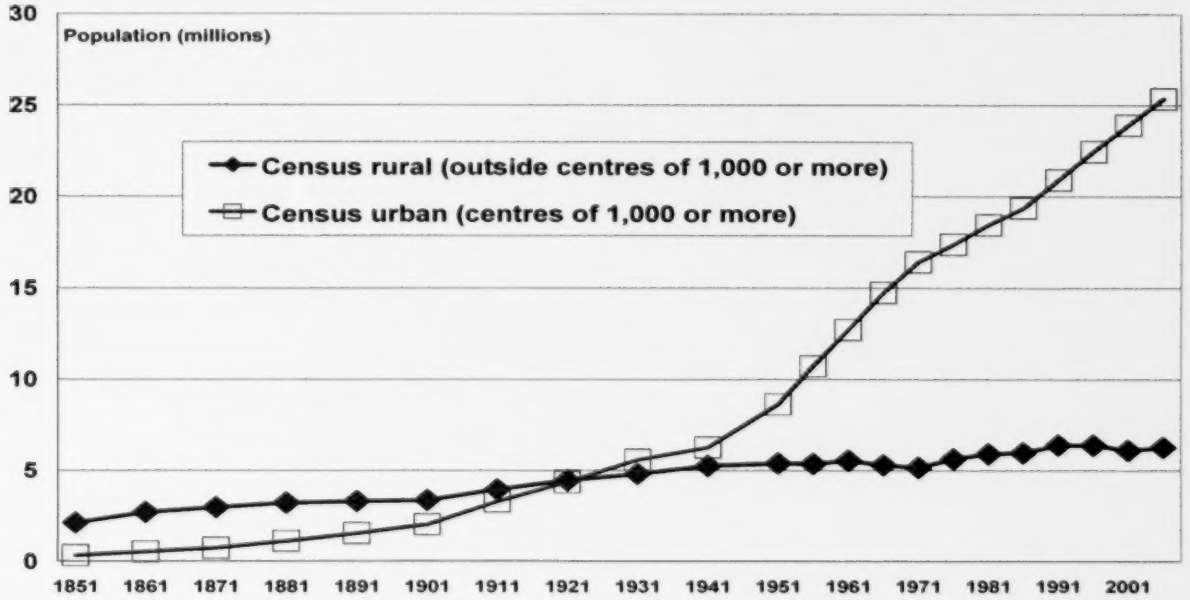
A rural definition where incorporated towns and municipalities are delineated as urban or rural should be used for the analysis of issues that are the responsibility of towns and municipalities. Suggested examples might be the provision of roads and libraries (but, again, sometimes these issues are managed at different scales in different situations). The RST definition is delineated by assigning complete towns and municipalities as RST.

A rural definition where regions (i.e. groups of communities, towns or municipalities) are classified as urban or rural should be used for the analysis of regional issues. Economic development and labour market issues (e.g. training programs) are regional issues because individuals can commute from one community to another. Thus, groups of communities would be expected to work together to promote mutual economic development and to improve their shared workforce. The OECD definition classifies regions as predominantly urban, intermediate or predominantly rural regions.

The long-term trends: The census rural population

The long-term trends are best portrayed by monitoring the rural population as published by the Census of Population – i.e. the census rural population (Box 1). According to this definition, the majority of Canada's population lived outside census urban settlements until shortly after 1921 (Figure 1). Since 1941, there has been stronger growth in census urban areas but only modest growth in census rural areas. Since 1941, the census rural population has varied between 5.2 million and 6.4 million. In 2006, Canada's census rural population increased marginally (3% over the previous five years) to reach 6.3 million. This was slightly below the 6.4 million recorded in 1991 and 1996. In the meantime, the census urban population has grown from 6 million in 1941 to 25 million in 2006 – the increase from 2001 to 2006 was 6%, twice the rate of growth in census rural areas in the same period.

Figure 1 Rural population in Canada became a minority after 1921



Note: Data are tabulated in the boundaries applicable at the time of the given census.
Source: Statistics Canada, Census of Population, 1851 to 2006.

Not every province has shown the same stability in its census rural population over the last six decades. Notably, the census rural population of Saskatchewan has continually declined over the last six decades (Table 1). Only Alberta and Manitoba have shown a consistent growth in their census rural population in recent quinquennial periods. The growth at the Canada level between 2001 and 2006 was due to growth in four provinces (Quebec, Ontario, Manitoba and Alberta) and two territories (Yukon and Northwest Territories)[1].

1. Details for each province and territory are presented in Bollman and Clemenson (forthcoming).

Table 1 Population change[1] in census rural areas, Canada, provinces and territories, 1951 to 2006

	1951 to 1956	1956 to 1961	1961 to 1966	1966 to 1971	1971 to 1976	1976 to 1981	1981 to 1986	1986 to 1991	1991 to 1996	1996 to 2001	2001 to 2006
	percent change										
Newfoundland and Labrador	11.2	-1.7	0.4	-1.5	2.8	2.3	-0.5	13.0	-9.9	-8.9	-1.6
Prince Edward Island	-6.7	2.8	-2.7	0.1	8.0	4.9	0.5	-0.5	-3.7	-0.6	0.1
Nova Scotia	-0.7	13.8	-5.8	7.7	7.1	4.0	5.6	4.1	-1.7	-2.5	1.4
New Brunswick	-0.1	6.5	-4.8	-10.2	18.1	6.3	4.6	5.4	-0.3	-4.3	-1.3
Quebec	2.1	-2.5	-7.2	-7.1	11.6	11.0	-0.1	7.0	-0.2	-7.8	5.3
Ontario	-3.3	8.5	-3.2	-0.6	14.5	1.4	3.4	12.2	-2.0	-2.6	3.5
Manitoba	0.7	-1.9	-4.8	-4.8	1.7	-3.7	0.2	2.9	3.0	0.1	4.2
Saskatchewan	-3.6	-5.7	-7.6	-10.6	-5.9	-1.2	-3.9	-6.1	-0.7	-3.6	-3.0
Alberta	-0.5	0.3	-6.7	-5.3	6.3	11.2	-4.3	5.4	7.6	2.8	3.7
British Columbia	0.1	20.2	3.6	14.5	7.4	6.2	-1.1	7.3	3.9	-10.4	0.7
Yukon	48.0	-0.2	-21.3	-5.1	18.9	-2.2	-0.4	38.0	7.5	-4.0	3.5
Northwest Territories[2]	11.2	-4.8	22.4	4.5	19.3	10.8	18.0	30.2	1.4	-9.2	11.1
Nunavut[1]	...	...	...	...	...	...	...	...	...	...	-7.6
Canada	-0.3	3.2	-4.5	-2.5	9.1	5.0	0.8	7.3	-0.1	-4.5	2.7

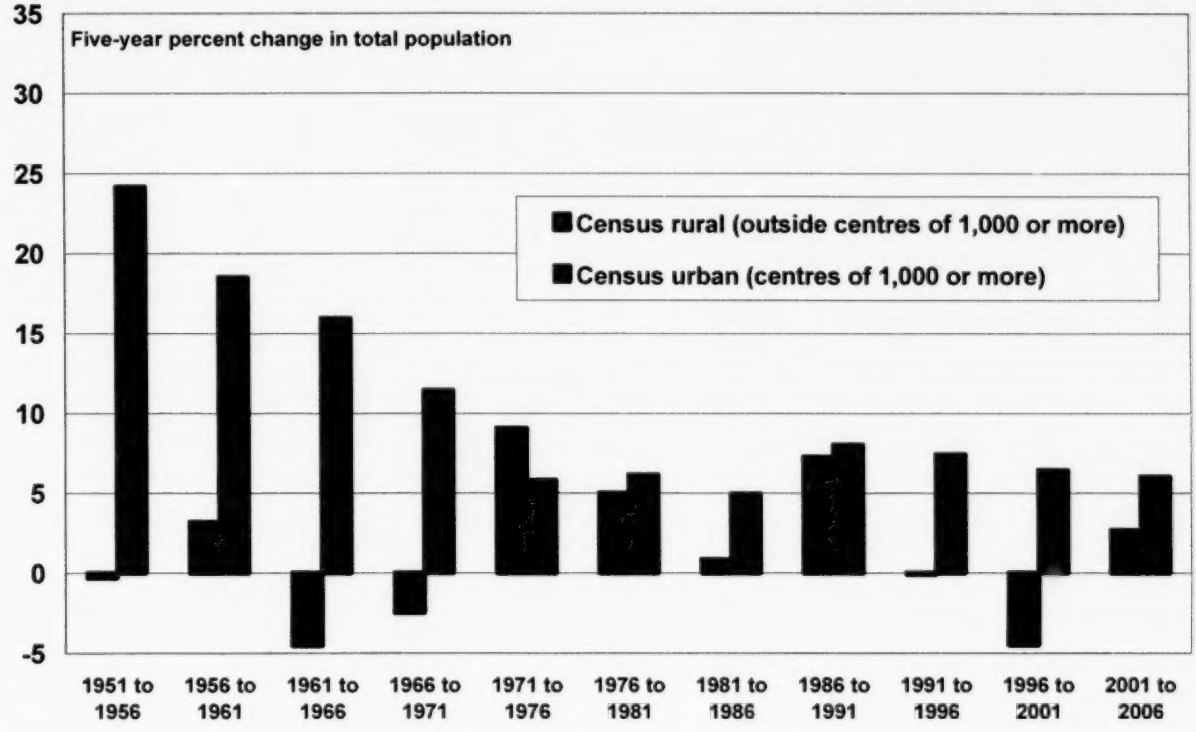
1. Population change, as calculated in this table, includes the change due to population growth or decline 'plus' the change due to reclassification of areas from rural to urban (or urban to rural). In general, reclassification makes only a small impact on the calculated change at the level of provinces or territories. However, for Nunavut in the 2001 to 2006 period, reclassification of areas from rural to urban resulted in a decline in the rural population (-7.6%, as reported here) but, within the rural areas that were not reclassified, the rural population grew by +12%.
2. Care should be exercised in comparing the Northwest Territories 2006 Census population counts with counts from the 2001 Census. In 2001, the net undercount for the overall Northwest Territories population was estimated at 8.11%, substantially higher than the national level of 2.99%, and almost double its 1996 level. The increase in the overall population between 2001 and 2006 is likely overstated due to improvements in coverage of the Northwest Territories in 2006.

Note: Data are tabulated in boundaries applicable at the time of the given census.
Source: Statistics Canada, Census of Population, 1951 to 2006.

To emphasize the continuous growth of the census urban population, Figure 2 shows that in each five-year period in the last fifty-five years, the census urban population has grown by 5% or more. On the other hand, the census rural population declined during the strong urban growth of the 1960s, then grew as part of the population turnaround of the 1970s and the 1980s (Rothwell *et al.* 2002a, with provincial detail in Rothwell *et al.* 2002b), declined in the 1990s and grew again from 2001 to 2006.

As emphasized by du Plessis *et al.* (2001), the choice of rural definition should be determined by the question being addressed. When Canadians lived in the "short distance society" (Persson *et al.*, 1997, Figure 10.2a), the census rural definition was appropriate because nearly all aspects of social interaction, including the place of work, was local. However, as Canadian society has moved to the "industrial society" and then to the "open society" (Persson *et al.*, 1997, Figures 10.2b and 10.2c), employment and social interaction is occurring across more and more space. Commuting longer distances is now a way of life for many workers.

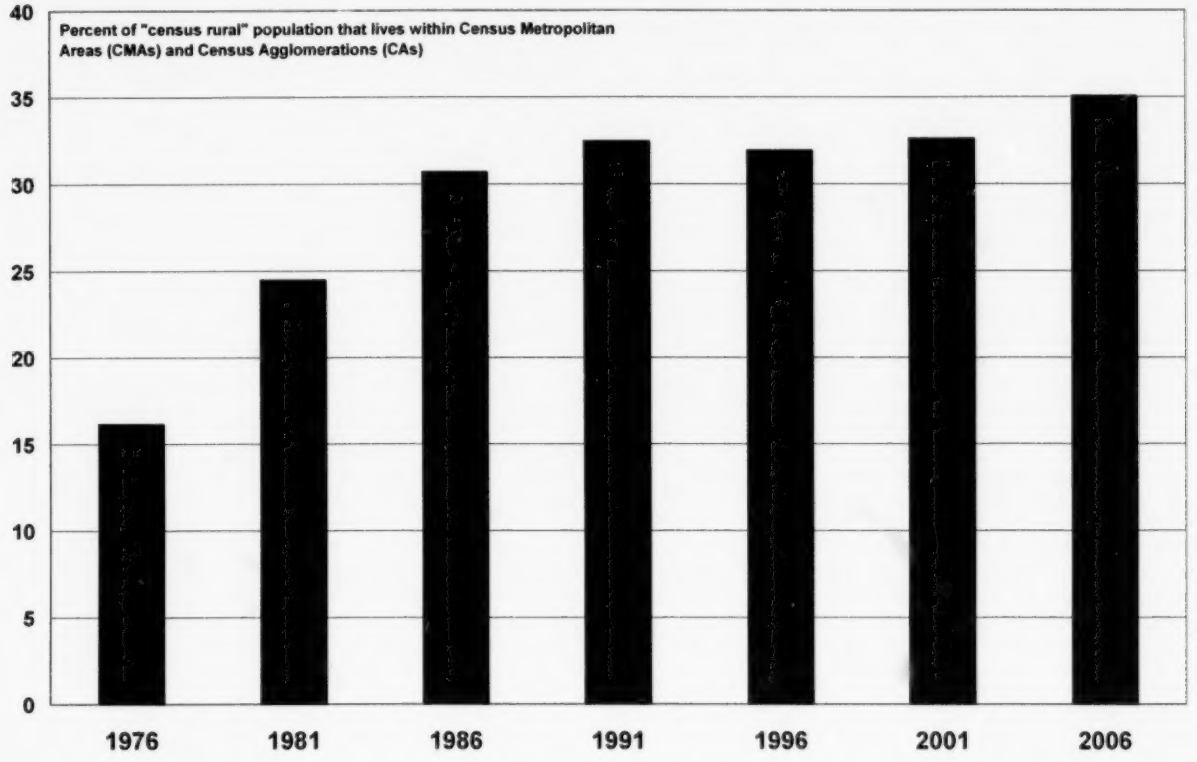
Figure 2 The census rural population grew in the 1950s, 1970s, 1980s and 2001 to 2006



Note: Data are tabulated in the boundaries applicable at the time of the given census. Thus, the reported change is due to population growth or decline plus the net impact of the re-classification of population as census urban or census rural.
Source: Statistics Canada, Census of Population, 1951 to 2006.

Statistics Canada delineates the commuting shed for larger urban centres (CMAs and CAs) by examining commuting patterns (Box 1). Not surprisingly, many census rural residents now live within the commuting zone of a larger urban centre. Specifically, by 2006, 35% of Canada's census rural population lived within the commuting zone of a larger urban centre and thus in close proximity to urban job opportunities (Figure 3).

Figure 3 The share of the census rural population residing within urban labour markets has more than doubled since 1976



Note: "Census rural" refers to the population outside settlements of 1,000 or more. In 2006, a Census Metropolitan Area (CMA) has a population of 100,000 or more (with 50,000 or more in the urban core). A Census Agglomeration (CA) has an urban core population of 10,000 or more. Both include the population in neighbouring towns or municipalities where 50% or more of the workforce commutes into the urban core.
Data are tabulated in boundaries applicable at the time of the given census.

Source: Statistics Canada, Census of Population, 1976 to 2006.

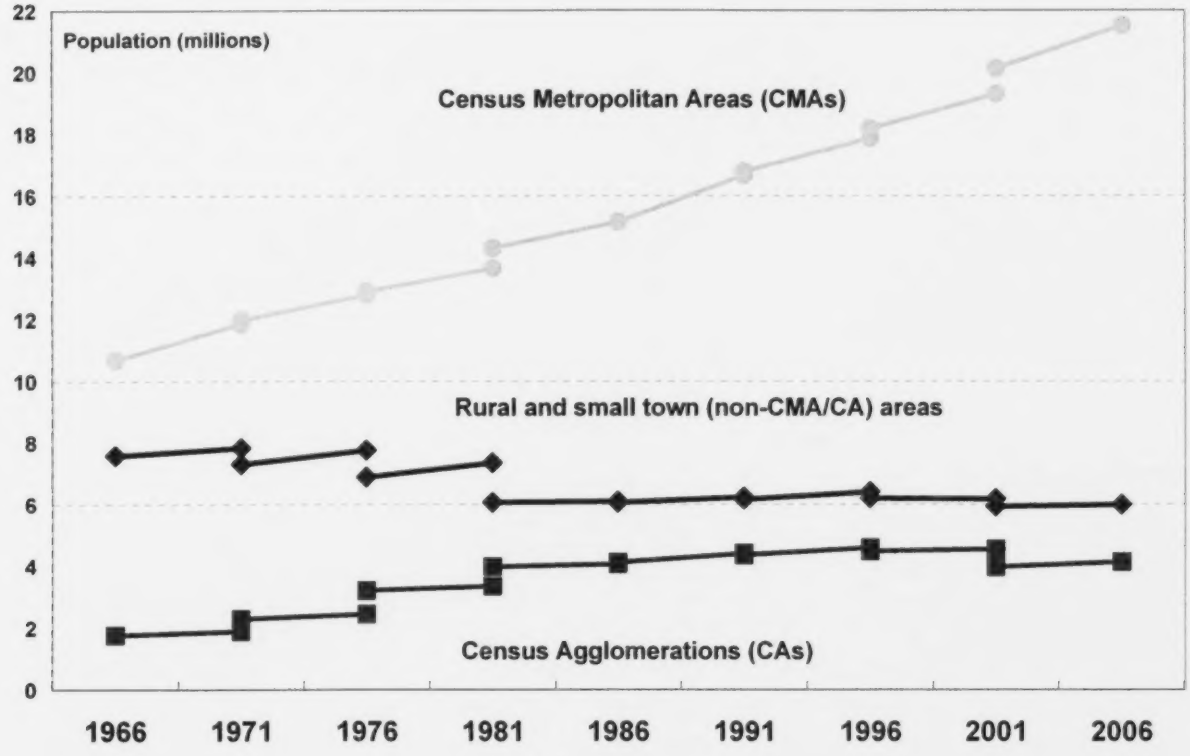
Demographic trends of larger urban centres and in rural and small town areas

As noted by Persson *et al.* (1997), Canadian society has transformed from a "short-distance society" to a more "open society." Driving long distances is becoming more common – thanks to better vehicles and better roads – although the recent trends indicate that the price of transporting people is now increasing (Bollman and Prud'homme, 2006). Thus, in order to understand the trends in the number of people living in rural and small town labour markets (i.e. in areas outside the commuting shed of larger urban centres), the demographic trends for Canada's rural and small town population are presented here.

In 1966, there were 7.6 million Canadians living in rural and small town labour markets (Figure 4). Residents in these areas are outside the main commuting zone of a town of 10,000 or more[2]. This population has tended to grow in each intercensal period–note that the line for RST slopes upward between each census period (except for 1996 to 2001)[3].

2. These individuals do not have (easy) access to the type of occupations associated with larger urban centres. Thus, the "type of labour market" in which they reside is rural and small town.
3. In Figure 4, each year has two data points. The data point for the population tabulated within the boundary of a given year is connected with a line to the data point for the previous census year where that data has been tabulated within the boundaries of the given census year. Thus, the line shows the population change within the (constant) boundaries of the end year of a five-year intercensal period. For any given year, the difference between the two dots is the size of the population that is reclassified according to the definition of the subsequent census (five years later). Reclassification of population includes the impact of a change in the boundaries of towns and municipalities, the impact of changes in which rural census subdivisions are assigned to a CMA or CA as commuting patterns change and the impact of settlements becoming classified as a CA as the size of the settlement grows (or, as population declines, there are cases where CAs are re-classified to RST areas).

Figure 4 In 2006, 6 million individuals were living in rural and small town areas



Note: In 2006, Census Metropolitan Areas (CMAs) have 50,000 or more inhabitants in the urban core with a total population of 100,000 or more and Census Agglomerations (CAs) have 10,000 or more in the urban core. Both Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs) include surrounding towns and municipalities where 50% or more of the workforce commutes to the urban core. Rural and small town (RST) refers to the population outside Census Metropolitan Areas (CMAs) and outside Census Agglomerations (CAs). The two data points for each year show the adjusted population count (due to reclassification) in order to make comparisons over time within constant boundaries.

Source: Statistics Canada, Census of Population, 1966 to 2006.

Since 1981, there have been about six million individuals living in RST areas. There was a marginal decline from 1996 to 2001. There was a 1% increase from 2001 to 2006. In 2006, there were six million inhabitants in RST areas[4].

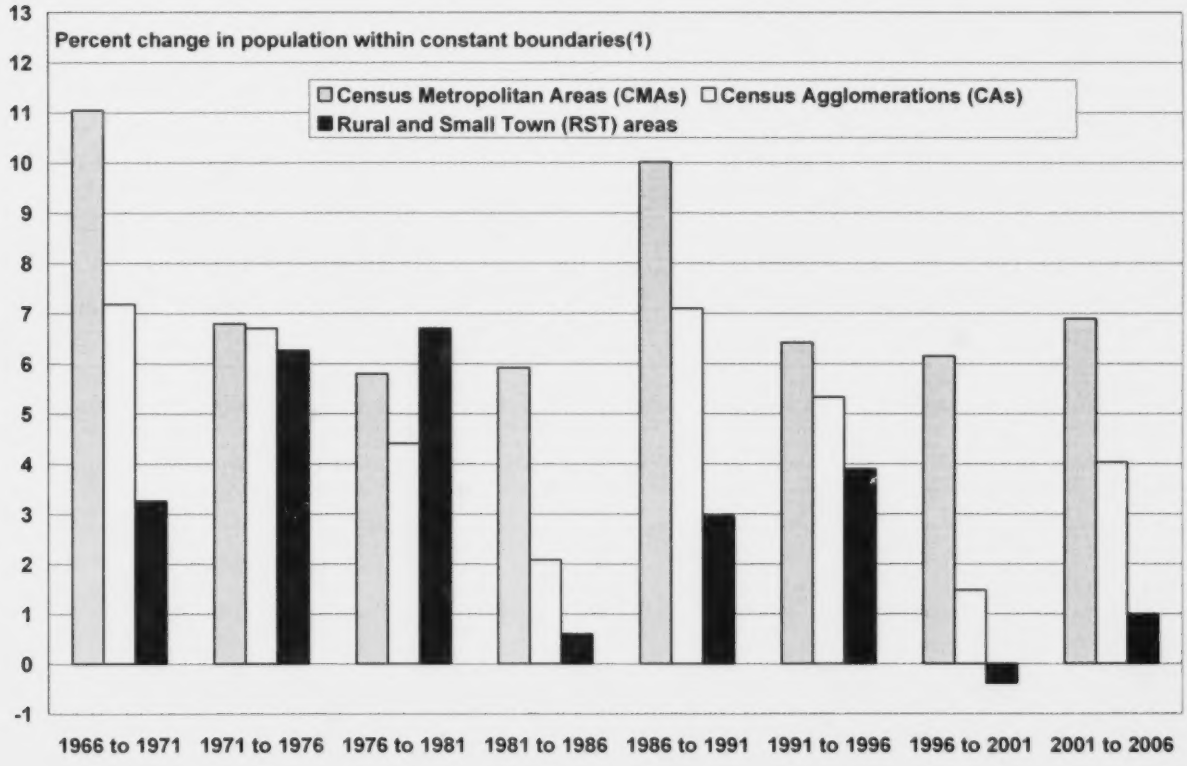
Note also that the RST population is larger than the population living in smaller cities (Census Agglomerations with an urban core population of 10,000 or more). In 2006, there were 4.1 million inhabitants in Census Agglomerations.

The relatively constant level of the RST population at the Canada level since 1981 hides considerable fluctuation in some provinces. Details for each province and territory are provided in Bollman and Clemenson (forthcoming).

4. Note that RST residents are not the same population as the census rural population. Recall that one-third of the census rural population lives in the countryside and in smaller settlements within CMAs and CAs. Thus, two-thirds of the census rural population lives in RST areas. The other residents of RST areas are census urban residents–inhabitants of settlements of 1,000 to 9,999.

The RST population has grown in each period since 1966, with the exception of the 1996 to 2001 period (Figure 5). However, at the Canada level, RST areas have grown slower than smaller cities (CAs) which, in turn, have grown slower than the larger cities (CMAs). There was one exception–in the 1976 to 1981 period, RST areas grew faster than the CMAs or CAs. One contributing factor was the so-called "turnaround" of rural-urban migration patterns. Canada had experienced net rural-to-urban migration for decades. In the 1970s, there was a "turnaround" in this pattern as there was net urban-to-rural migration. Specifically, more people moved from urban to rural than moved from rural to urban (Rothwell *et al.*, 2002a, 2002b).

Figure 5 Larger cities grew more than smaller cities and (except from 1976 to 1981) smaller cities grew more than rural and small town areas



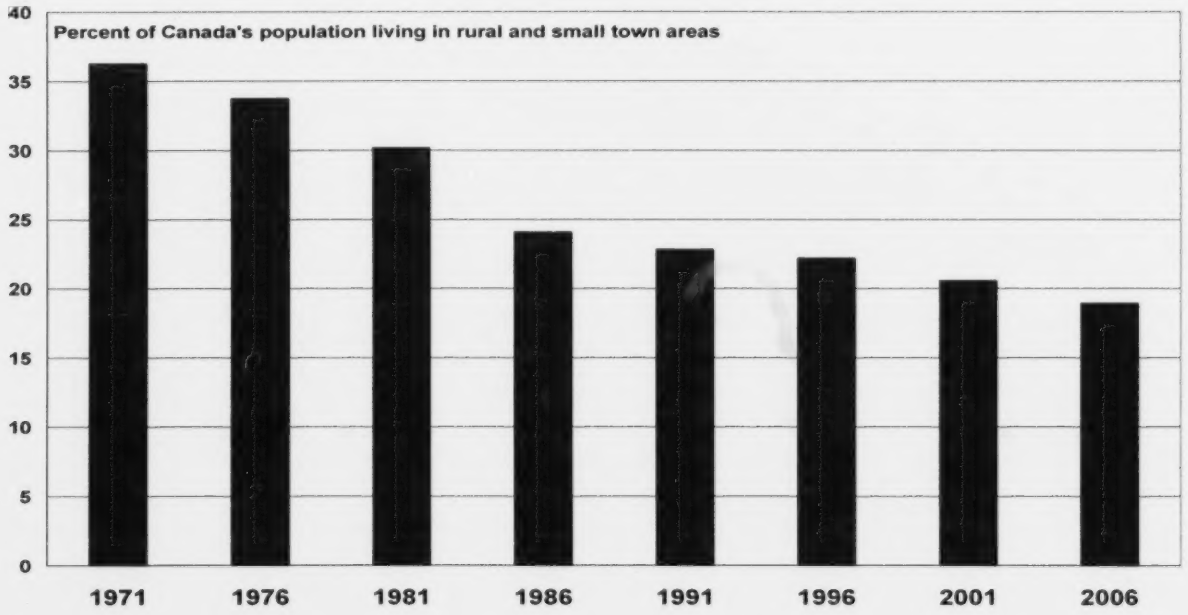
1. Each 5-year change is tabulated within the boundaries applicable to the census at the end of the 5-year period.

Note: In 2006, Census Metropolitan Areas (CMAs) have a total population of 100,000 or more (with an urban core of 50,000 or more) and they include neighbouring towns and municipalities where 50% or more of the workforce commutes to the urban core. Census Agglomerations (CAs) have an urban core of 10,000 or more persons plus neighbouring towns and municipalities where 50% or more of the workforce commutes to the urban core. Rural and small town (RST) areas are outside the commuting zones of Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs).

Source: Statistics Canada, Census of Population, 1971 to 2006.

Due both to population reclassification and slower rural population growth, the share of Canada's population living in rural and small town areas has declined from 36% in 1971 to 19% in 2006 (Figure 6). This decline is continuing in a context where the rural and small town population has been steady at around 6 million inhabitants for the past 25 years.

Figure 6 Share of population in rural and small town areas declined to 19% in 2006

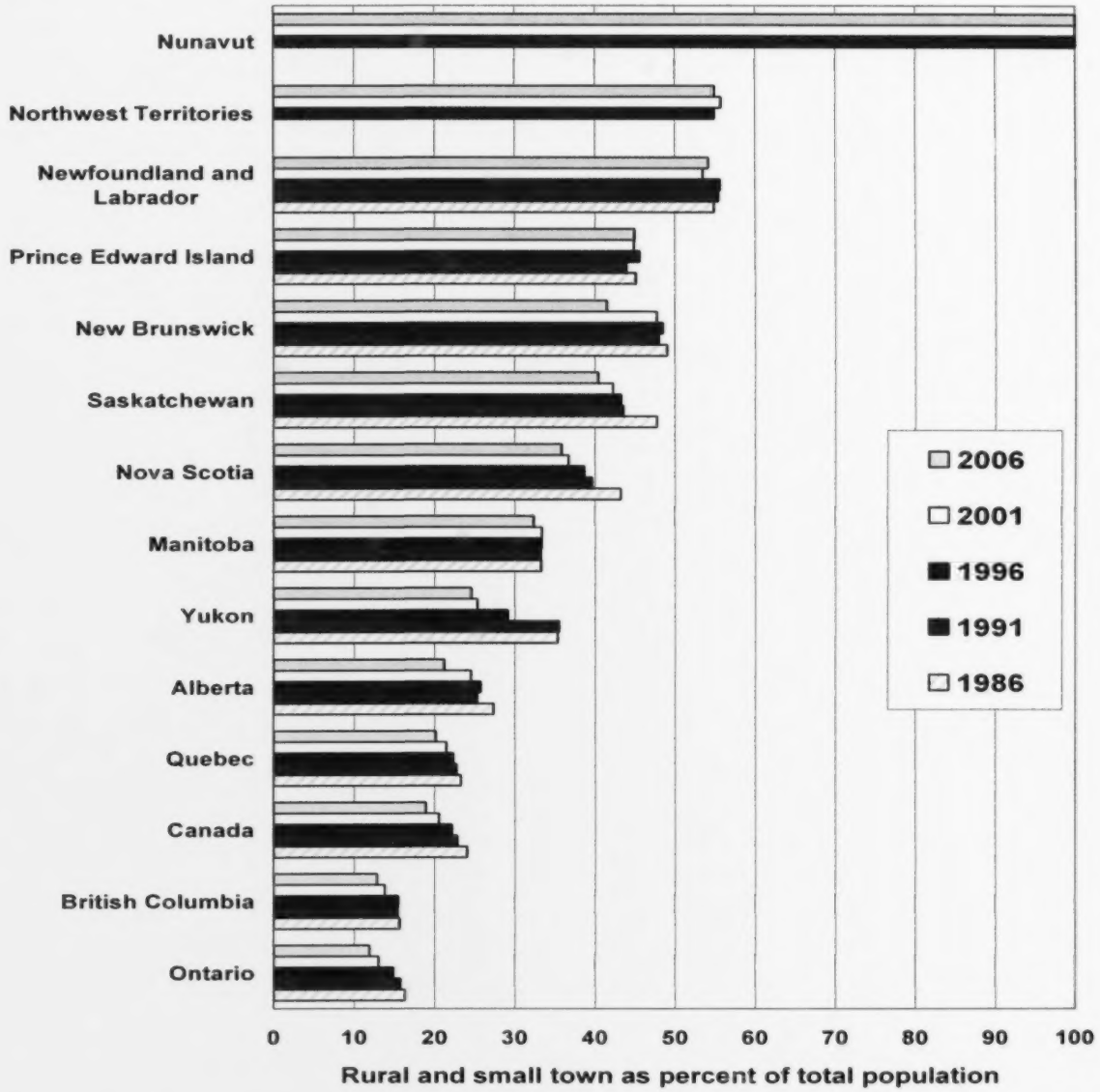


Note: Rural and small town refers to the population outside Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs). Data are tabulated within the boundaries applicable at the time of the given census.
Source: Statistics Canada, Census of Population, 1971 to 2006.

Again, there is a wide range across the provinces in terms of the share of the population living in RST areas. In 2006, only 12% of Ontario's population was living in RST areas. In contrast, 100% of Nunavut's population is classified as rural and small town (Figure 7). The sharp decline from 2001 to 2006 in the share of the New Brunswick population living in RST areas was due to the classification of Miramichi as a CA (with a 2001 population of 25,274) plus an expansion in the boundaries of the Bathurst CA (8,588 residents in 2001 were re-classified into the CA) and an expansion in the boundaries of the New Brunswick component of the Campbellton CA (2,555 residents in 2001 were re-classified into the CA). This reclassification of 36,417 individuals reduced the RST share of the New Brunswick population by 5.1 percentage points. Note also that the RST share of the total population of Newfoundland and Labrador increased from 2001 to 2006 due to the re-classification of the former CAs of Gander and Labrador City to RST areas. This was partially offset by the classification of Bay Roberts as a CA in this period.

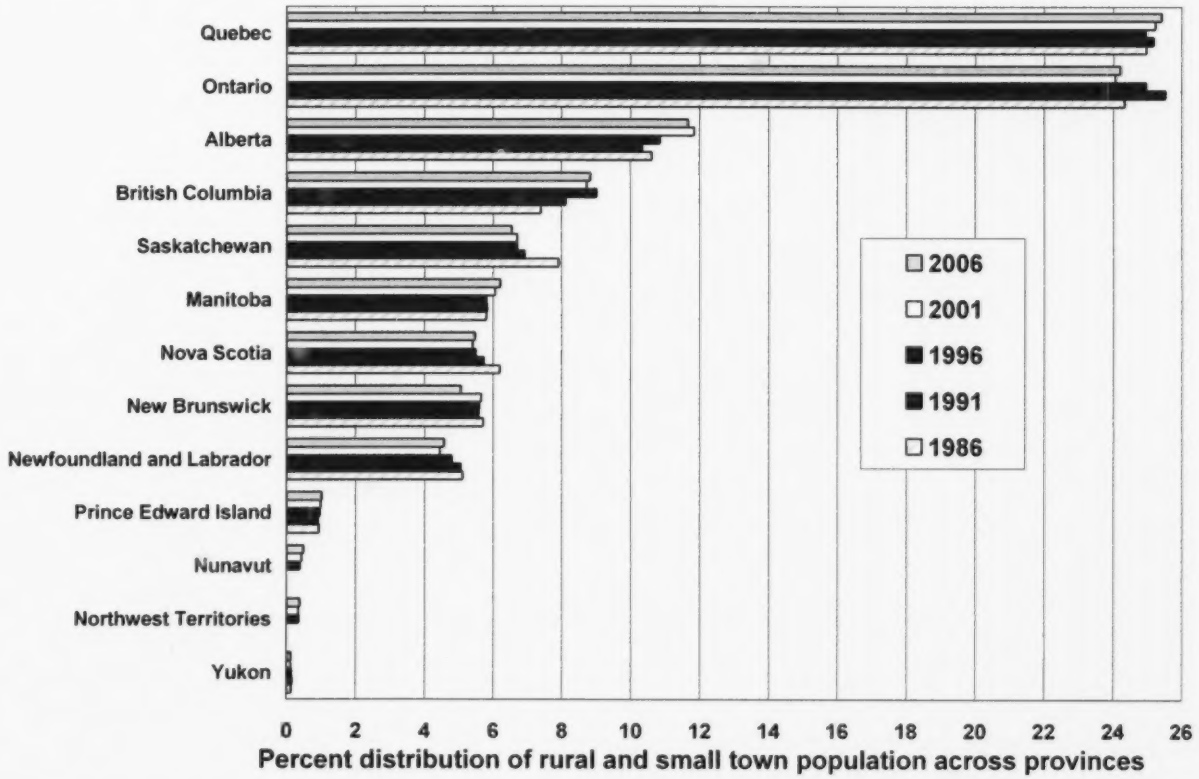
Although a relatively small share of Ontario's population is RST, these 1.4 million inhabitants constitute 24% of Canada's RST population (Figure 8). Quebec contributes a slightly higher share of Canada's RST population, at 25% in 2006. Thus, although the RST residents of Ontario and Quebec are a relatively small share of the population within their respective provinces, these residents comprise one-half of all RST residents in Canada.

Figure 7 Canada's most populous provinces are the least rural



Note: Rural and small town refers to the population outside Census Metropolitan Areas (CMAs) and outside Census Agglomerations (CAs). Data are tabulated in the boundaries applicable at the time of the given census.
Source: Statistics Canada, Census of Population, 1966 to 2006.

Figure 8 In 2006, Quebec and Ontario had one-half of Canada's rural and small town population



Notes: Rural and small town refers to the population outside Census Metropolitan Areas (CMAs) and outside Census Agglomerations (CAs). Data are tabulated in the boundaries applicable at the time of the given census.
Source: Statistics Canada, Census of Population, 1986 to 2006.

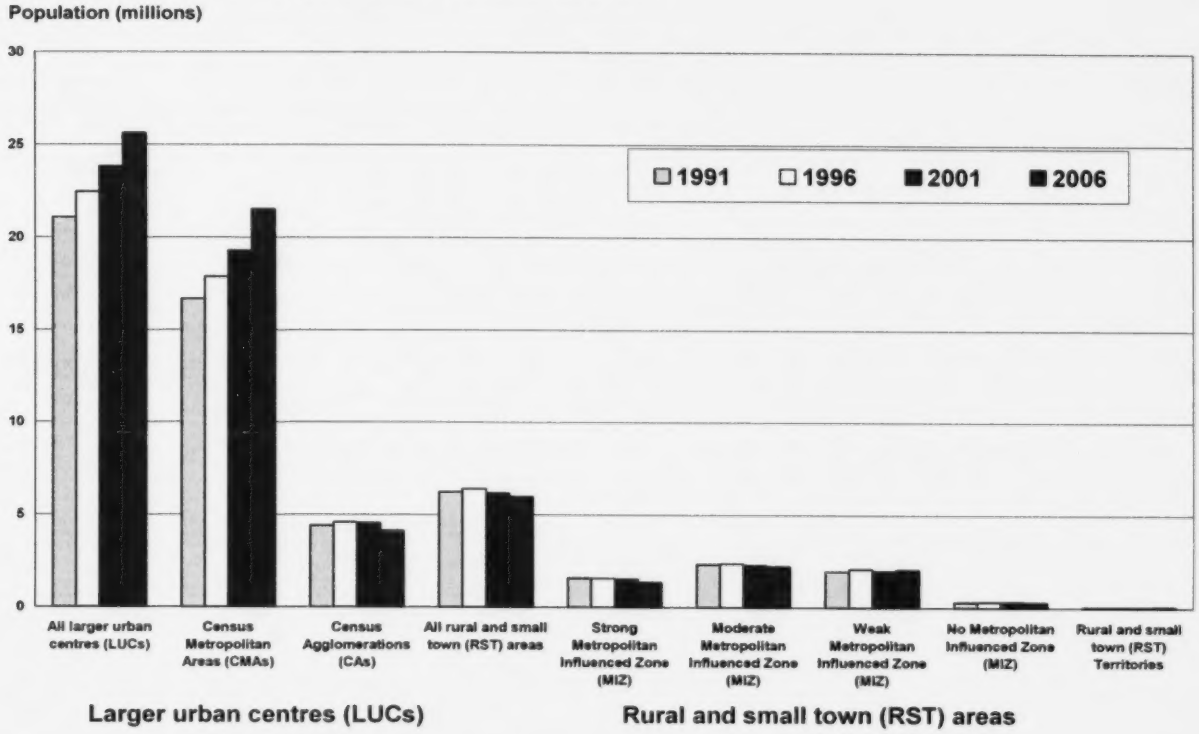
Differences within rural and small town areas: population by metropolitan influenced zone

Not all rural and small town areas are the same. One way to differentiate among RST areas is to classify them according to the degree to which they are influenced by larger urban centres. The Statistics Canada MIZ (Metropolitan Influenced Zone) coding for each town and municipality is used for this purpose (Box 1).

In 2006, the six million RST residents were distributed as follows:

- About 1.4 million were living in a Strong MIZ.
- About 2.2 million were living in a Moderate MIZ.
- Another 2.0 million were living a Weak MIZ.
- Only about 0.3 million were living in a No MIZ.
- 0.06 million were living outside the CAs of Yellowknife and Whitehorse in the Territories (Figure 9).

Figure 9 Within rural and small town areas in 2006, 4.2 million people were living in either a moderate or weak Metropolitan Influenced Zone (MIZ)



Note: Data are tabulated within boundaries applicable at the time of the given census.

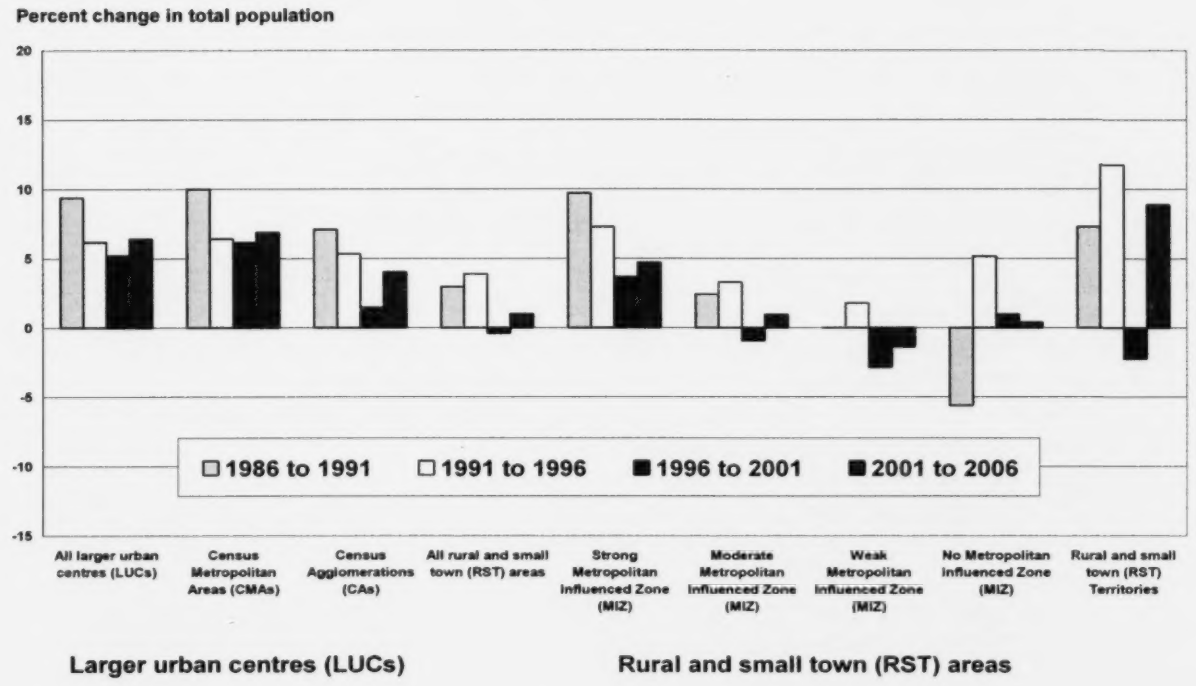
In 2006, Census Metropolitan Areas (CMAs) have a population of 100,000 or more (with 50,000 or more in the urban core) and includes all neighbouring towns and municipalities where 50% or more of the workforce commutes to the urban core. Census Agglomerations (CAs) have 10,000 or more in the urban core and includes all neighbouring towns and municipalities where 50% or more of the workforce commutes to the urban core. Metropolitan Influenced Zones (MIZ) are assigned on the basis of the share of the workforce that commutes to any Census Metropolitan Area (CMA) or Census Agglomeration (CA) (strong Metropolitan Influenced Zone (MIZ): 30% or more; moderate Metropolitan Influenced Zone (MIZ): 5% to 29%; weak Metropolitan Influenced Zone (MIZ): 1% to 5%; no Metropolitan Influenced Zone (MIZ): no commuters).

Source: Statistics Canada, Census of Population, 1991 to 2006.

Again, the distribution of population across the MIZ categories varies considerably across the provinces and Territories (Bollman and Clemenson, forthcoming).

It has already been noted that larger cities (CMAs) grew faster than smaller cities (CAs) which, in turn, tended to grow faster than RST areas. Here again the influence of the larger urban centres is evident. In each five-year period since 1986, Strong MIZ grew faster than Moderate MIZ which, in turn, grew faster than Weak MIZ (Figure 10). However, the population of No MIZ and the RST areas in the Territories fluctuate more – part of the growth is due to higher birth rates among the Aboriginal population. In 2001, 19% of Canada's population was under 15 years of age but 25% of the No MIZ population was under 15 years of age (Sorenson and Aylward, 2005, Table 3).

Figure 10 In each period, the population in the strong Metropolitan Influenced Zone (MIZ) grew faster than in the moderate Metropolitan Influenced Zone (MIZ) which, in turn, grew faster than in the weak Metropolitan Influenced Zone (MIZ)



Note: Within each 5-year period, the data are tabulated within the (constant) boundaries applicable to the census year at the end of the 5-year period.
In 2006, Census Metropolitan Areas (CMAs) have a total population of 100,000 or more (with 50,000 or more in the urban core) and includes all neighbouring towns and municipalities where 50% or more of the workforce commutes to the urban core. Census Agglomerations (CAs) have 10,000 or more in the urban core and includes all neighbouring towns and municipalities where 50% or more of the workforce commutes to the urban core. Metropolitan Influenced Zones (MIZ) are assigned on the basis of the share of the workforce that commutes to any Census Metropolitan Area (CMA) or Census Agglomeration (CA) (strong Metropolitan Influenced Zone (MIZ): 30% or more; moderate Metropolitan Influenced Zone (MIZ): 5% to 29%; weak Metropolitan Influenced Zone (MIZ): 1% to 5%; no Metropolitan Influenced Zone (MIZ): no commuters).

Source: Statistics Canada, Census of Population, 1986 to 2006.

This general growth pattern appears in most provinces in most periods. For example, the higher growth in Strong MIZ at the Canada level is due to high growth in Strong MIZ in Quebec, Ontario, Manitoba, Alberta and British Columbia over the 1986 to 2006 period (Table 2). However, there was no growth in the Strong MIZ of Newfoundland and Labrador since 1986.

The bulk of Canada's RST population lives in Moderate and Weak MIZ. At the Canada level, Moderate MIZ showed population growth in every period except 1996 to 2006 while Weak MIZ showed no change between 1986 and 1991, some growth between 1991 and 1996 and a decline in the 1996 to 2001 and the 2001 to 2006 periods.

Among the provinces, the Moderate MIZ of Newfoundland and Labrador and Saskatchewan saw a decline in population in every five-year period from 1986 to 2006. In contrast, the Moderate MIZ of Manitoba, Alberta and British Columbia experienced population growth in every period.

The only province to experience population growth in every period from 1986 to 2006 in its Weak MIZ was Alberta. The Weak MIZ of Newfoundland and Labrador, Prince Edward Island, Nova Scotia and Saskatchewan saw a decline in every period from 1986 to 2006.

The population of No MIZ is Aboriginal intensive. However, the higher birth rates of the Aboriginal population did not trigger continuous growth in No MIZ in most jurisdictions in the 1986 to 2006 period. Despite this, Canada's No MIZ has seen population growth in every five-year period since 1991. This growth has been mainly driven by the No MIZ of Ontario and Alberta which have experienced substantial population growth during these periods.

Table 2 Population change in rural and small town areas by Metropolitan Influenced Zone (MIZ), Canada, provinces and territories, 1986 to 2006

		All rural and small town areas	Strong Metropolitan Influenced Zone (MIZ)	Moderate Metropolitan Influenced Zone (MIZ)	Weak Metropolitan Influenced Zone (MIZ)	No Metropolitan Influenced Zone (MIZ)	Rural and small town (RST) territories
		percent change					
Newfoundland and Labrador	1986 to 1991	-3.0	-3.5	-4.3	-1.0	-4.9	...
	1991 to 1996	-5.1	-4.0	-6.5	-3.1	-7.5	...
	1996 to 2001	-10.6	-10.7	-10.9	-10.0	-11.2	...
	2001 to 2006	-5.6	-0.2	-6.6	-5.6	-6.4	...
Prince Edward Island	1986 to 1991	-0.2	1.6	-0.9	-0.5	-7.8	...
	1991 to 1996	2.4	5.9	1.7	-0.1	-10.2	...
	1996 to 2001	-1.0	0.1	-1.2	-2.0	-5.8	...
	2001 to 2006	-1.3	0.0	-1.6	-2.7	2.1	...
Nova Scotia	1986 to 1991	0.5	4.6	0.9	-0.2	-2.0	...
	1991 to 1996	-0.6	5.0	1.2	-2.2	2.5	...
	1996 to 2001	-2.3	4.9	-2.1	-3.2	-1.3	...
	2001 to 2006	-1.8	2.7	-0.2	-2.9	-2.7	...
New Brunswick	1986 to 1991	-0.2	1.5	-1.0	0.8	-6.7	...
	1991 to 1996	1.3	2.0	1.2	-0.2	14.1	...
	1996 to 2001	-2.7	-1.6	-3.5	-2.9	3.0	...
	2001 to 2006	-2.5	2.8	-3.4	-2.8	-4.2	...
Quebec	1986 to 1991	1.6	9.2	-0.4	-1.6	-3.8	...
	1991 to 1996	3.5	8.0	2.2	0.8	4.1	...
	1996 to 2001	-0.8	2.3	-1.3	-4.4	-0.4	...
	2001 to 2006	2.2	6.0	1.6	-0.8	0.8	...
Ontario	1986 to 1991	9.3	12.8	7.7	6.2	-14.4	...
	1991 to 1996	4.7	6.6	3.6	1.0	10.1	...
	1996 to 2001	1.5	4.1	-0.1	-2.9	11.6	...
	2001 to 2006	2.4	3.5	1.7	-1.1	25.4	...
Manitoba	1986 to 1991	0.5	7.4	1.6	-1.3	-3.7	...
	1991 to 1996	4.4	7.8	4.4	2.3	10.2	...
	1996 to 2001	0.5	3.1	1.8	-1.3	1.4	...
	2001 to 2006	2.4	5.2	3.5	2.2	-2.7	...

See note at end of table.

Table 2 Population change in rural and small town areas by Metropolitan Influenced Zone (MIZ), Canada, provinces and territories, 1986 to 2006 (continued)

		All rural and small town areas	Strong Metropolitan Influenced Zone (MIZ)	Moderate Metropolitan Influenced Zone (MIZ)	Weak Metropolitan Influenced Zone (MIZ)	No Metropolitan Influenced Zone (MIZ)	Rural and small town (RST) territories
		percent change					
Saskatchewan	1986 to 1991	-6.9	-6.3	-6.4	-6.7	-8.0	...
	1991 to 1996	-2.0	-1.9	-2.3	-2.2	-1.1	...
	1996 to 2001	-3.5	0.8	-2.6	-4.4	-3.5	...
	2001 to 2006	-4.7	0.3	-4.8	-4.8	-5.7	...
Alberta	1986 to 1991	3.1	7.8	4.0	1.9	-3.5	...
	1991 to 1996	7.8	12.6	7.0	5.8	19.7	...
	1996 to 2001	5.5	12.7	5.9	1.8	17.9	...
	2001 to 2006	3.8	12.9	3.4	1.6	14.1	...
British Columbia	1986 to 1991	7.2	7.9	15.0	1.4	8.6	...
	1991 to 1996	12.8	14.0	17.6	8.6	14.3	...
	1996 to 2001	-1.1	2.5	0.7	-3.9	1.1	...
	2001 to 2006	0.8	4.8	4.6	-2.8	0.1	...
Yukon	1986 to 1991	18.9	...	...	...	...	18.9
	1991 to 1996	16.0	...	...	...	...	16.0
	1996 to 2001	-18.9	...	...	...	...	-18.9
	2001 to 2006	2.8	...	...	...	...	2.8
Northwest Territories[1] and Nunavut	1986 to 1991	4.9	...	...	...	...	4.9
	1991 to 1996	11.0	...	...	...	...	11.0
	1996 to 2001	0.9	...	...	...	...	0.9
	2001 to 2006	9.8	...	...	...	...	9.8
Canada	1986 to 1991	3.0	9.7	2.4	0.0	-5.6	7.3
	1991 to 1996	3.9	7.3	3.3	1.8	5.2	11.7
	1996 to 2001	-0.4	3.7	-0.9	-2.9	1.0	-2.2
	2001 to 2006	1.0	4.7	0.9	-1.4	0.4	8.9

1. Care should be exercised in comparing the Northwest Territories 2006 Census population counts with counts from the 2001 Census. In 2001, the net undercount for the overall Northwest Territories population was estimated at 8.11%, substantially higher than the national level of 2.99%, and almost double its 1996 level. The increase in the overall population between 2001 and 2006 is likely overstated due to improvements in coverage of the Northwest Territories in 2006.

Note: Data are calculated within the (constant) boundary of the census year at the end of each 5-year period.

Source: Statistics Canada, Census of Population, 1986 to 2006.

Demographic trends inside and outside predominantly rural regions

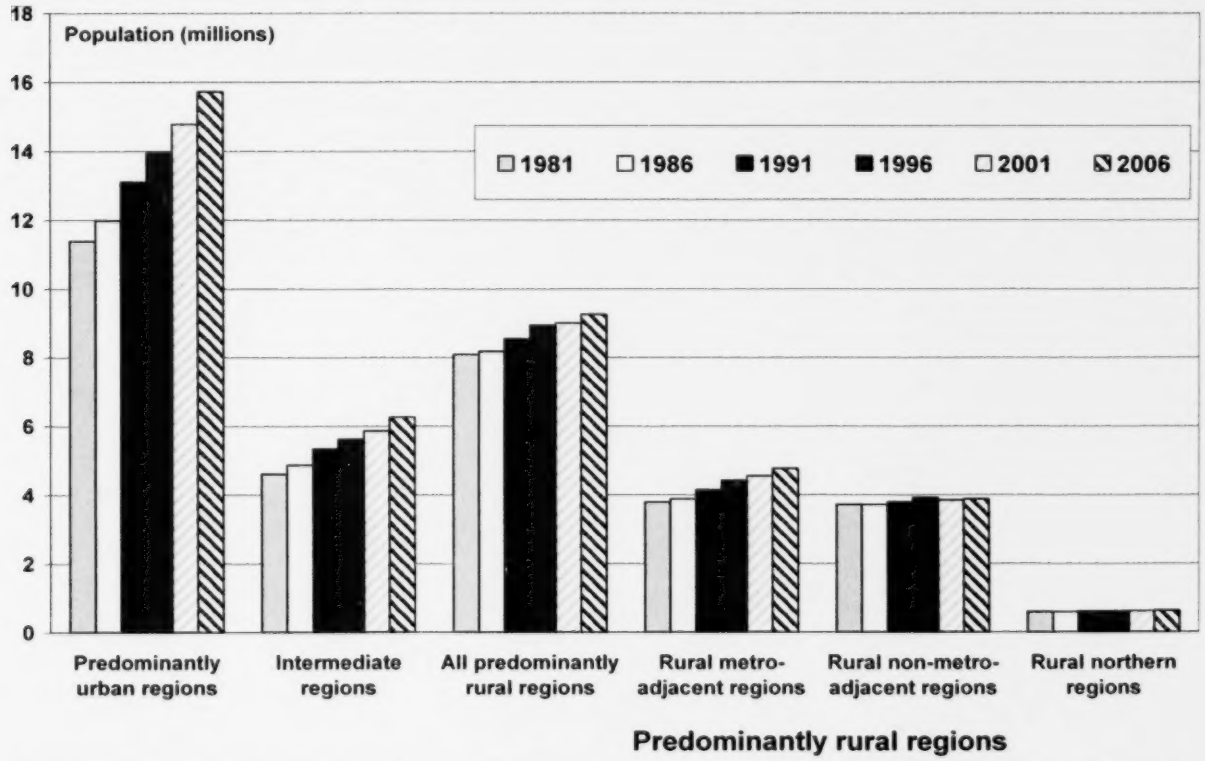
The final rural definition considered here is the definition used by the Organisation for Economic Co-operation and Development (OECD) which provides a broader, regional focus with which to examine census data (Box 1). Census divisions are used as the unit representing "regions". The OECD definition of rural is based on the population structure in 1996 (see Appendix–The rural quandary–for an explanation of the issues surrounding rural/urban boundaries).

In 1981, the population in predominantly rural regions was 8.1 million (Figure 11). The population in predominantly rural regions increased in each intercensal period from 1981 to 2006, reaching 9.4 million in 2006.

Within predominantly rural regions, the population in rural metro-adjacent regions increased in each period, reaching 4.8 million in 2006. The population in rural non-metro adjacent regions has experienced very slight growth over this 25-year period, reaching 3.9 million residents in 2006.

Meanwhile, the population in Canada's rural northern regions remained almost constant, recording 0.6 million residents in 2006.

Figure 11 Growing population in rural metro-adjacent regions

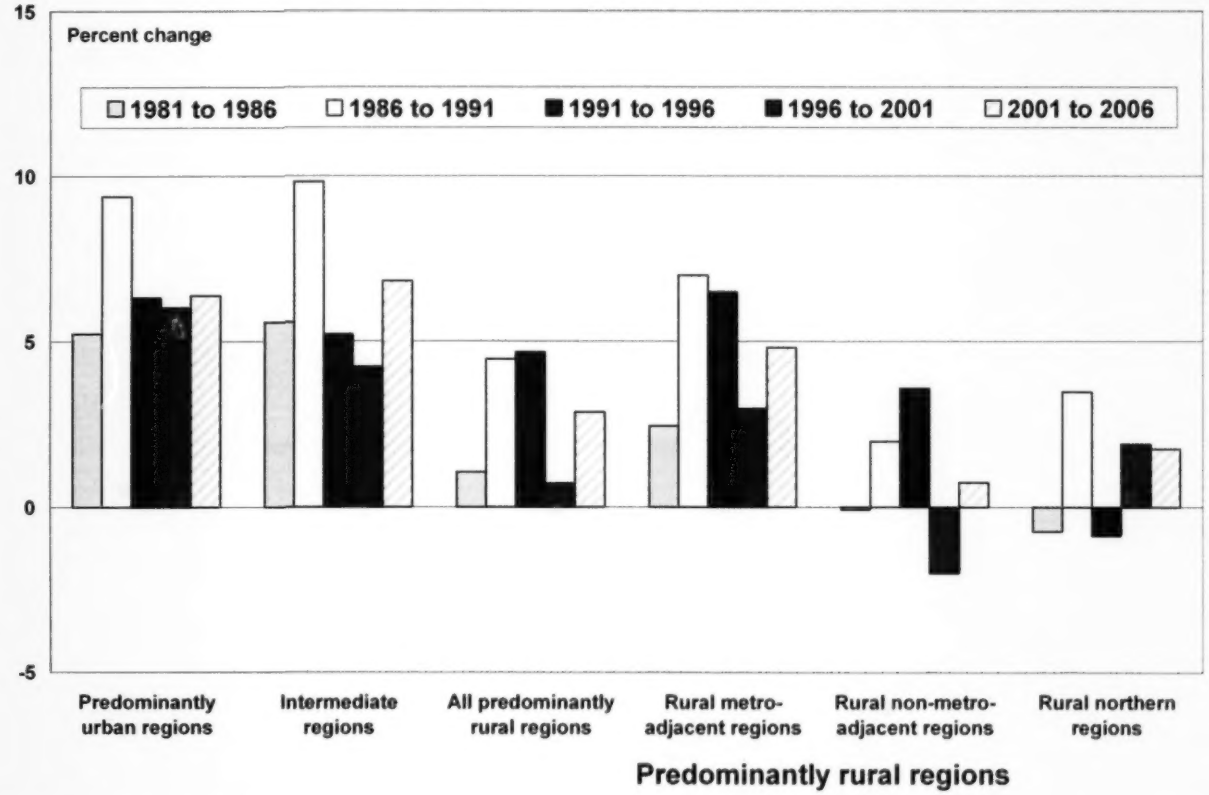


Note: This chart uses the Organisation for Economic Co-operation and Development (OECD) regional typology. As a result, the data are tabulated within constant 1996 boundaries and apply to the non-institutional population only.

Source: Statistics Canada. Census of Population, 1981 to 2006.

Predominantly urban and intermediate regions recorded strong population growth over the 1981 to 2006 period. Growth in these regions was over 9% in the 1986 to 1991 period and over 6% in the most recent 2001 to 2006 period (Figure 12). During that latter period, the predominantly rural population growth was 3%. In each period, the predominantly rural population grew more slowly than in the more urban regions. Also, rural metro-adjacent population grew in each period whereas the population in the more rural regions (i.e. in rural non-metro-adjacent regions and rural northern regions) declined in some intercensal periods.

Figure 12 The predominantly rural population grew, but more slowly than the population of intermediate or predominantly urban regions



Note: This chart uses the Organisation for Economic Co-operation and Development (OECD) regional typology. As a result, the data are tabulated within constant 1996 boundaries and apply to the non-institutional population only.
Source: Statistics Canada, Census of Population, 1981 to 2006.

Among the provinces and territories, the population growth in predominantly rural regions has varied across the country. In the Atlantic Provinces, only Prince Edward Island has seen continuous growth, whereas Newfoundland and Labrador has witnessed a steady population decline in its predominantly rural regions in all census periods since 1981 (Table 3). Both New Brunswick and Nova Scotia have experienced predominantly rural population decline in at least two intercensal

periods. Elsewhere, Saskatchewan has declined since 1986 and Quebec declined in the 1981 to 1986 period and the 1996 to 2001 period. In contrast, Prince Edward Island, Ontario, Manitoba, Alberta and British Columbia have seen a population increase in every 5-year period from 1981 to 2006 in their predominantly rural regions.

Table 3 Population change by type of region, Canada, provinces and territories, 1981 to 2006

					Predominantly rural regions			
		Predominantly urban regions	Intermediate regions	All predominantly rural regions	Rural metro-adjacent regions	Rural non-metro-adjacent regions	Rural northern regions	All types of regions
		percent change						
Newfoundland and Labrador	1981 to 1986	...	2.8	-2.0	...	-1.5	-4.2	0.0
	1986 to 1991	...	2.9	-2.2	...	-2.9	1.2	0.0
	1991 to 1996	...	-0.6	-4.9	...	-4.6	-6.1	-3.0
	1996 to 2001	...	-3.4	-10.2	...	-10.7	-8.0	-7.1
	2001 to 2006	...	2.4	-4.9	...	-4.4	-7.3	-1.5
Prince Edward Island	1981 to 1986	...	...	3.2	4.7	1.7	...	3.2
	1986 to 1991	...	...	2.4	5.8	-1.0	...	2.4
	1991 to 1996	...	...	3.7	5.0	2.3	...	3.7
	1996 to 2001	...	...	0.4	1.5	-0.8	...	0.4
	2001 to 2006	...	...	0.6	1.8	-0.7	...	0.6
Nova Scotia	1981 to 1986	...	6.1	1.3	0.9	1.7	...	2.9
	1986 to 1991	...	8.1	0.4	0.4	0.5	...	3.1
	1991 to 1996	...	3.7	-0.6	0.0	-1.1	...	1.0
	1996 to 2001	...	4.6	-3.2	-3.3	-3.2	...	-0.3
	2001 to 2006	...	3.8	-1.5	-1.2	-1.8	...	0.6
New Brunswick	1981 to 1986	-4.0	3.9	2.4	4.7	0.3	...	1.8
	1986 to 1991	-1.3	6.7	1.9	4.3	-0.4	...	2.1
	1991 to 1996	-2.6	4.2	2.1	4.0	0.2	...	1.8
	1996 to 2001	-3.5	1.4	-1.5	1.1	-4.3	...	-1.4
	2001 to 2006	-2.7	4.3	-0.3	3.2	-4.3	...	0.0
Quebec	1981 to 1986	2.2	2.6	-1.3	0.5	-2.6	-2.3	1.3
	1986 to 1991	6.9	6.7	1.4	4.8	-0.9	-1.1	5.5
	1991 to 1996	3.3	4.3	3.2	5.6	1.5	2.2	3.5
	1996 to 2001	2.3	1.0	-1.5	1.1	-3.5	-1.9	1.1
	2001 to 2006	4.6	5.4	2.9	5.7	0.9	-0.3	4.3
Ontario	1981 to 1986	6.3	6.9	1.6	3.1	0.3	-6.4	5.5
	1986 to 1991	9.6	13.7	10.3	11.6	8.4	4.1	10.8
	1991 to 1996	6.9	6.9	5.6	6.8	3.0	2.7	6.7
	1996 to 2001	6.9	7.0	2.4	4.3	-0.9	-6.2	6.0
	2001 to 2006	6.2	8.9	4.4	5.4	2.7	-0.2	6.6
Manitoba	1981 to 1986	5.2	...	1.5	5.1	-2.7	5.6	3.5
	1986 to 1991	3.9	...	1.6	6.2	-1.7	-0.7	2.9
	1991 to 1996	0.5	...	3.8	5.3	1.6	6.5	1.9
	1996 to 2001	-0.2	...	0.9	4.6	-1.6	-2.6	0.3
	2001 to 2006	2.5	...	2.9	5.8	-0.1	2.5	2.7

See note at end of table.

Table 3 Population change by type of region, Canada, provinces and territories, 1981 to 2006 (continued)

					Predominantly rural regions			
		Predominantly urban regions	Intermediate regions	All predominantly rural regions	Rural metro-adjacent regions	Rural non-metro-adjacent regions	Rural northern regions	All types of regions
		percent change						
Saskatchewan	1981 to 1986	...	9.5	0.6	1.4	-0.1	0.1	4.2
	1986 to 1991	...	2.9	-5.8	-4.8	-7.6	4.9	-2.1
	1991 to 1996	...	2.0	-1.5	-1.5	-3.2	16.4	0.1
	1996 to 2001	...	0.7	-3.1	-2.2	-4.6	2.8	-1.4
	2001 to 2006	...	1.9	-3.5	-2.8	-5.3	6.1	-1.0
Alberta	1981 to 1986	6.5	...	4.4	3.6	4.9	12.8	5.7
	1986 to 1991	10.4	...	2.6	3.9	0.4	0.2	7.6
	1991 to 1996	5.9	...	6.1	6.7	6.1	-3.1	6.0
	1996 to 2001	12.0	...	6.7	7.8	3.0	17.6	10.2
	2001 to 2006	12.2	...	7.8	7.7	5.5	23.6	10.7
British Columbia	1981 to 1986	8.4	...	0.8	0.9	1.5	-4.3	5.0
	1986 to 1991	15.8	...	11.5	14.3	11.0	3.8	14.0
	1991 to 1996	13.2	...	14.2	16.6	14.0	5.3	13.6
	1996 to 2001	7.6	...	1.2	2.4	1.3	-5.9	4.9
	2001 to 2006	6.5	...	3.5	5.5	3.5	-6.6	5.3
Yukon	1981 to 1986	...	...	1.2	...	...	1.2	1.2
	1986 to 1991	...	...	18.4	...	...	18.4	18.4
	1991 to 1996	...	...	10.8	...	...	10.8	10.8
	1996 to 2001	...	...	-7.0	...	...	-7.0	-7.0
	2001 to 2006	...	...	5.9	...	...	5.9	5.9
Northwest Territories[1] and Nunavut	1981 to 1986	...	...	14.3	...	...	14.3	14.3
	1986 to 1991	...	...	10.4	...	...	10.4	10.4
	1991 to 1996	...	...	11.6	...	...	11.6	11.6
	1996 to 2001	...	...	-0.5	...	...	-0.5	-0.5
	2001 to 2006	...	...	10.4	...	...	10.4	10.4
Canada	1981 to 1986	5.2	5.6	1.1	2.4	-0.1	-0.7	3.9
	1986 to 1991	9.4	9.8	4.5	7.0	2.0	3.5	7.9
	1991 to 1996	6.3	5.2	4.7	6.5	3.6	-0.9	5.6
	1996 to 2001	6.0	4.2	0.7	3.0	-2.0	1.9	4.0
	2001 to 2006	6.4	6.8	2.9	4.8	0.7	1.8	5.4

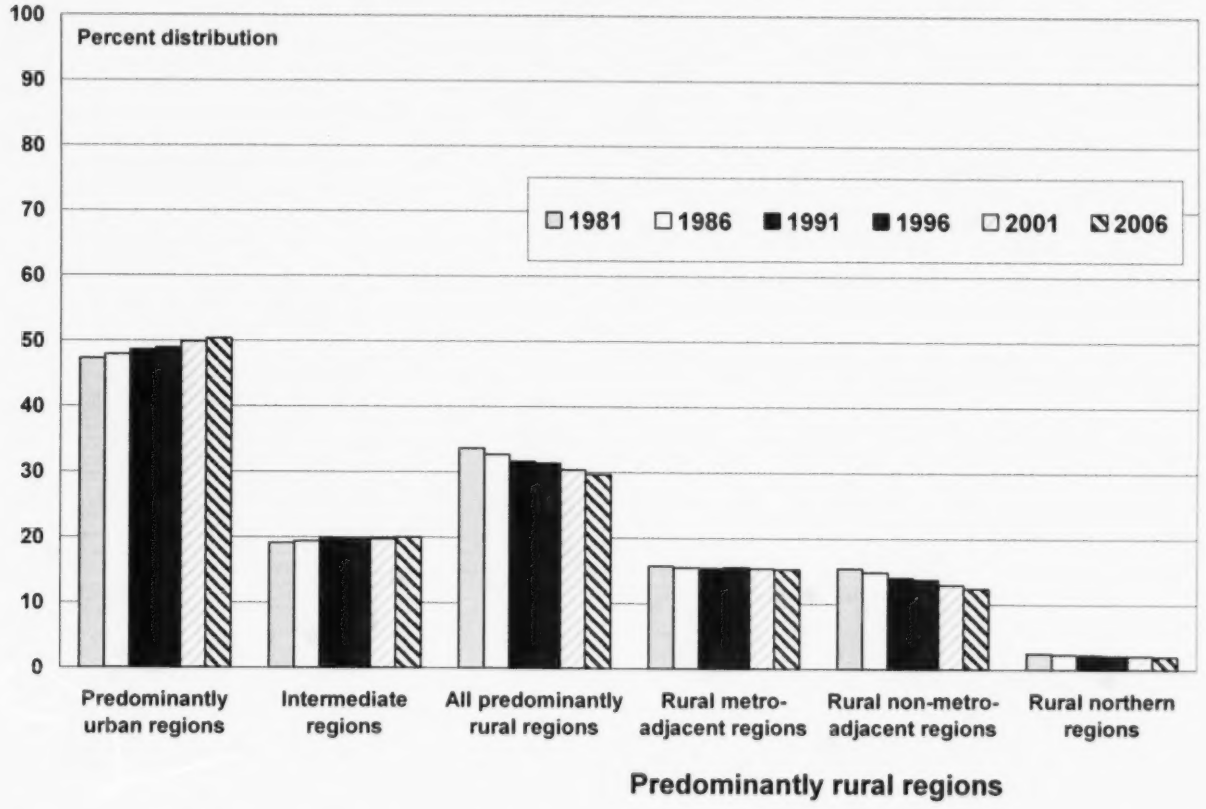
1. Care should be exercised in comparing the Northwest Territories 2006 Census population counts with counts from the 2001 Census. In 2001, the net undercounting for the overall Northwest Territories population was estimated at 8.11%, substantially higher than the national level of 2.99%, and almost double its 1996 level. The increase in the overall population between 2001 and 2006 is likely overstated due to improvements in coverage of the Northwest Territories in 2006.

Note: This chart uses the Organisation for Economic Co-operation and Development (OECD) regional typology. As a result, the data are tabulated within constant 1996 boundaries and apply to the non-institutional population only.

Source: Statistics Canada, Census of Population, 1981 to 2006.

Due to the relatively strong growth of population in predominantly urban and intermediate regions, the share of Canada's population in predominantly rural regions declined to 30% in 2006 (Figure 13). Recall that this is in the context of continuous (but relatively smaller) population growth in predominantly rural regions. The greatest decline in share was in rural non-metro-adjacent regions where the share fell from 15% in 1981 to 12% by 2006. In contrast, the share of Canada's population living in predominantly urban regions rose from 47% in 1981 to 50% by 2006.

Figure 13 Declining share of population in each type of rural region



Note: This chart uses the Organisation for Economic Co-operation and Development (OECD) regional typology. As a result, the data are tabulated within constant 1996 boundaries and apply to the non-institutional population only.
Source: Statistics Canada, Census of Population, 1981 to 2006.

This pattern of declining population shares of rural regions was mirrored in the majority of provinces for all types of rural regions. However, in Prince Edward Island, New Brunswick and in Manitoba, the share of the total population in rural metro-adjacent regions increased slightly over time (for details, see Bollman and Clemenson, forthcoming).

Summary

This paper has looked at Canada's rural population using three alternative definitions of rural. Using the first definition, census rural Canadians became a minority shortly after 1921. This transition varied by province. Saskatchewan's rural population became a minority only in 1971. In New Brunswick, the rural and urban population has been about even for the past 25 years with the census rural population representing 49% of the provincial population in 2006. Prince Edward Island and Nunavut remain as the only two jurisdictions where the census rural population represents a majority.

Over time, a larger and larger share of the census rural population (living outside settlements of 1,000 or more) has been living within the commuting zone of larger urban centres. Among individuals living in the countryside (i.e. the census rural population) in 2006, over one-third (35%) were living relatively near the jobs (and other services) of a larger urban centre.

Turning to the second definition of rural, the rural and small town population (living outside the commuting zone of larger urban centres) has maintained a level of about six million inhabitants since 1981. However, stronger growth among the population of larger urban centres means these six million individuals represent a smaller and smaller share of Canada's total population. Their share was down to 19% of Canada's population in 2006.

However, the population of rural and small town areas remains larger than the overall population of all smaller cities. In 2006, six million individuals lived in rural and small town areas, but only 4.1 million individuals lived in towns or cities with a population of 10,000 to 99,999 (i.e. Census Agglomerations).

Nearly one-quarter (23%) of rural and small town Canadians live within a (long) commute of a larger urban centre–i.e. they live in strong metropolitan influenced zones. Thus, over three-quarters of rural and small town Canadians rely almost[5] solely on labour markets outside centres of 10,000 or more.

At the broader regional level of analysis, which represents the final definition of rural, the trends and patterns are similar to that of other rural definitions. Generally, the total population in rural regions has increased but the share of the total population has declined (to 30%) relative to the share in urban and intermediate areas. As with the rural and small town areas, those rural regions adjacent to metropolitan areas witnessed the highest growth from 1981 to 2006.

In plain words, the results show that the size of the rural population has remained stable over the last 25 years, although with a modest positive growth. However due to a rapid urban population growth, the weight of the rural population in the national demographic picture has declined steadily. The differences lie in the detailed actual numbers and the geography represented. As stated at the outset, the choice of a definition should be driven by the rural issue or question being addressed.

5. In 2001 within Strong MIZ, 41% of the resident workers commuted to a larger urban centre. For other MIZ categories, the share of resident workers commuting to a larger urban centre was small (13% in moderate MIZ and 1% in weak MIZ) (Harris *et al.*, 2008).

References

Bollman, Ray D. and Marc Prud'homme. (2006) "Trends in the prices of rurality", **Rural and Small Town Canada Analysis Bulletin** Vol. 6, No. 7 (Ottawa: Statistics Canada, Catalogue no. 21-006-X) (http://www.statcan.ca/cgi-bin/downpub/listpub.cgi?catno=21-006-XIE2005007.htm).

Bollman, Ray D. and Heather A. Clemenson (forthcoming). **Structure and Change in Canada's Rural Demography: An Update to 2006 with Provincial Detail.** (Ottawa: Statistics Canada, Agriculture and Rural Working Paper, Catalogue no. 21-601-M).

du Plessis, Valerie, Roland Beshiri, Ray D. Bollman and Heather Clemenson. (2001) "Definitions of Rural", **Rural and Small Town Canada Analysis Bulletin** Vol. 3, No. 3 (Ottawa: Statistics Canada, Catalogue no. 21-006-X) (http://www.statcan.ca/cgi-bin/downpub/listpub.cgi?catno=21-006-XIE2001003.htm).

du Plessis, Valerie, Roland Beshiri, Ray D. Bollman and Heather Clemenson. (2002) **Definitions of Rural** (Ottawa: Statistics Canada, Agriculture and Rural Working Paper No. 61, Catalogue no. 21-601-M) (http://www.statcan.gc.ca/english/research/21-601-MIE/21-601-MIE2002061.htm).

Ehrensaft, Philip and Jennifer Beeman. (1992) "Distance and Diversity in Nonmetropolitan Economies", Chapter 9 in Ray D. Bollman, **Rural and Small Town Canada** (Toronto: Thompson Educational Publishing), pp. 193-224.

Harris, Spencer, Alessandro Alasia and Ray D. Bollman. (2008) "Rural commuting: Its relevance to rural and urban labour markets", **Rural and Small Town Canada Analysis Bulletin,** Vol. 7, No. 6 (Ottawa: Statistics Canada, Catalogue. no. 21-006-X) (http://www.statcan.gc.ca/english/freepub/21-006-XIE/21-006-XIE2007006.htm).

McNiven, Chuck, Henry Puderer and Darryl Janes. (2000) **Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ): A Description of the Methodology** (Ottawa: Statistics Canada, Geography Working Paper Series No. 2000-2, Catalogue no. 92F0138M) (http://www.statcan.gc.ca/cgi-bin/downpub/listpub.cgi?catno=92F0138MIE2000002.htm).

OECD. (1994) **Creating Rural Indicators for Shaping Territorial Policies** (Paris: OECD).

Mwansa, Pius and Ray D. Bollman. (2005) "Community demographic trends within their regional context", **Rural and Small Town Canada Analysis Bulletin** Vol. 6, No. 3 (Ottawa: Statistics Canada, Catalogue no. 21-006-X) (http://www.statcan.ca/cgi-bin/downpub/listpub.cgi?catno=21-006-XIE2005003.htm).

Persson, Lars Olaf, Erik Westholm and Tony Fuller. (1997) "Two Contexts, One Outcome: The Importance of Lifestyle Choice in Creating Rural Jobs in Canada and Sweden," Chapter 10 in Ray D. Bollman and John M. Bryden (ed.) **Rural Employment: An International Perspective** (Brandon: Brandon University for the Canadian Rural Revitalization Foundation and Wallingford, U.K.: CAB International). Pp. 136 – 163.

Rothwell, Neil, Ray D. Bollman, Juno Tremblay and Jeff Marshall. (2002a) "Migration to and from Rural and Small Town Canada", **Rural and Small Town Canada Analysis**

Bulletin Vol. 3, No. 6 (Ottawa: Statistics Canada, Catalogue no. 21-006-X) (http://www.statcan.ca/cgi-bin/downpub/listpub.cgi?catno=21-006-XIE2001006.htm).

Rothwell, Neil, Ray D. Bollman, Juno Tremblay and Jeff Marshall. (2002b) **Recent Migration Patterns in Rural and Small Town Canada** (Ottawa: Statistics Canada, Agriculture and Rural Working Paper No. 55, Catalogue no. 21-601-M) (http://www.statcan.gc.ca/cgi-bin/downpub/listpub.cgi?catno=21-601-MIE2002055.htm).

Sorenson, Marianne and Jesse Aylward. (2005) **Rural Canada Profile: A Ten Year Census Analysis (1991 – 2001)** (Ottawa: Rural Secretariat) (http://www.rural.gc.ca/research/profile/index_e.phtml).

Statistics Canada. (2002) **2001 Census Dictionary** (Ottawa: Statistics Canada, Catalogue no. 92-378) (http://www12.statcan.gc.ca/english/census01/Products/Reference/dict/index.htm).

Statistics Canada. (2007) **2006 Census Dictionary** (Ottawa: Statistics Canada, Catalogue no. 92-566) (http://www.statcan.ca/bsolc/english/bsolc?catno=92-566-X.htm).

Ray D. Bollman is Chief of the Research and Rural Data Section and Heather A. Clemenson was an analyst in the Research and Rural Data Section, Agriculture Division.

Appendix

The rural quandary: Analyzing geographic data over time

Do we hold constant the concept of "rural" or do we hold constant a specific geographic space that was classified as rural at one point in time? As readers might surmise, there is no easy answer to this question. Sometimes, the analytic question determines the choice while at other times it is the availability of data. In this paper three different definitions of rural have been used. Two of these hold the concept of rural constant (and changes geographic boundaries as appropriate) while the other holds a geographic space that was once designated rural constant and ignores subsequent demographic changes that could alter the rural/urban designation of certain areas.

Our analysis of census rural and census urban uses a "constant concept" of rural and urban over the entire time period. This implies that a person living in a given geographic space could be classified as rural in one time period and be classified as urban in the next time period. This would happen if the size of the town grew from under 1,000 inhabitants in the first period to over 1,000 inhabitants in the second period. One consequence of using this "constant concept" is that the change in the number of individuals classified as census rural is due to the growth or decline in the number of people in a geographic unit classified as census rural in the two time periods minus the individuals reclassified from census rural to census urban plus the individuals reclassified from census urban to census rural. The reclassification of some towns from census rural to census urban did make a difference to the calculated rate of change of the census rural population of Nunavut between 2001 and 2006 (see Footnote 1 in Table 1).

Our analysis of population in larger urban centres, rural and small town areas and each MIZ also uses a "constant concept" in the sense that the data for each year are tabulated into the geographic groups that applies to the given year. However, the rate of change for each five-year period is calculated within the constant boundaries that apply at the end of the five-year period. Thus, the rate of population change from 1966 to 1971 is calculated for the geographic space as delineated in 1971 and the rate of population change for the 2001 to 2006 period is calculated for the geographic grid delineated in 2006. Thus, the change in the population in each five-year period applies to population living in a constant geographic space (i.e. re-classification is not an issue) but the five-year growth rates in different periods apply to different geographic spaces (in the case where the classification of census subdivisions to LUC, RST and MIZ changes over time) (Also see Footnote 3 on page 9).

Our analysis of the OECD regional types holds constant the geographic grid (i.e. the data are tabulated in constant boundaries) over the entire 25 year study period. The delineation of census divisions as predominantly urban, intermediate and predominantly rural is based on the population structure in 1996. Thus, there is no reclassification between urban and rural in this analysis.

Another Statistics Canada innovation...

Readers may also be interested in: EnviroStats (Catalogue no. 16-002-X)

EnviroStats is Statistics Canada's quarterly bulletin of environmental and sustainable development statistics.

EnviroStats provides regular statistical analysis of environmental topics written for a broad audience. At the core of each issue is a feature article. Shorter articles highlight new statistical developments or introduce new concepts. "Updates" cover recent and upcoming events such as releases of new statistical products or overviews of surveys under way. An extensive data table ensures that readers have the most recent statistics available. Each issue will also feature a map illustrating and analyzing a current topic.

Statistics Canada http://www.statcan.gc.ca/bsolc/english/bsolc?catno=16-002-X.

Rural and Small Town Canada Analysis Bulletins (Cat. no. 21-006-X)

Our latest editions

Vol. 7 No. 6: Rural Commuting: Its Relevance to Rural and Urban Labour Market
Spencer Harris, Alessandro Alasia and Ray D. Bollman

Vol. 7 No. 4: A Comparison of Rural and Urban Workers Living in Low Income
Myriam Fortin

Vol. 7 No. 3: Factors Associated with Internet Use: Does Rurality Matter?
Larry McKeown, Anthony Noce and Peter Czerny

Vol. 7 No. 2: Rural-Urban Differences Across Canada's Watersheds
Neil Rothwell

Complete list of bulletins by major subject (note that some bulletins appear in more than one category)

Rural overview	Volume 1 No. 6; Volume 3 No. 3; Volume 4 No. 7; Volume 5 No. 2; Volume 6 No. 7
Demographics and migration	Volume 1 No. 1; Volume 2 No. 2; Volume 2 No. 3; Volume 3 No. 6; Volume 4 No. 2; Volume 5 No. 4; Volume 6 No. 3
Education and skills	Volume 4 No. 5; Volume 5 No. 6; Volume 6 No. 2; Volume 7 No. 1
Agriculture	Volume 3 No. 2; Volume 4 No. 8; Volume 6 No. 1
Workforce and employment	Volume 1 No. 2; Volume 2 No. 1; Volume 2 No. 6; Volume 2 No. 7; Volume 2 No. 8; Volume 3 No. 1; Volume 3 No. 4; Volume 3 No. 8; Volume 4 No. 1; Volume 4 No. 3; Volume 4 No. 7; Volume 5 No. 5; Volume 6 No. 8
Business	Volume 1 No. 3
Tourism	Volume 5 No. 8; Volume 6 No. 5
Income and expenditure	Volume 1 No. 4; Volume 2 No. 5; Volume 3 No. 7; Volume 4 No. 4; Volume 5 No. 7; Volume 7 No. 4
Housing	Volume 2 No. 4
Health	Volume 1 No. 5; Volume 4 No. 6; Volume 5 No. 3
Internet and computer use	Volume 1 No. 7; Volume 3 No. 5; Volume 5 No. 1; Volume 7 No. 3
Social trends	Volume 6 No. 4; Volume 7 No. 1
Environment	Volume 6 No. 6; Volume 7 No. 2
Aboriginal and the north	Volume 1 No. 8